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中国蛩螽族三新属七新种

(直翅目: 螽蟖总科: 蛩螽科)

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摘要: 根据中国蛩螽族的材料, 记述3新属7新种, 并附中国蛩螽族短翅类群的分属检索表。所有模式标本均保存在中国科学院上海昆虫研究所。

关键词: 蛩螽族; 短翅类群; 新属; 新种; 中国、直翅目、蛩螽科
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蛩螽族系 Brumeister 于 1838 建立,迄今为止东半球已经记载了 58 属 17 亚属 348 种和 6 亚种。在亚洲有 16 属涉及短翅类群,它们是 *Thaumaspis* Bolivar, 1900; *Nicephora* Bolivar, 1900; *Cecidophagula* Uvarov, 1939; *Phlugiolopsis* Zeuner, 1940; *Acyrtaspia* Bey-Bienko, 1955; *Cyrtopsis* Bey-Bienko, 1962; *Tettigoniopsis* Yamasaki, 1982; *Cosmetura* Yamasaki, 1983; *Cononicephora*, Gorochov, 1993; *Acononicephora* Gorochov, 1994; *Neocononicephora* Gorochov, 1998; *Gibbomeconema* Ishikawa, 1999; *Kinkiconcephalopsis* Kano, 1999; *Microconocephalopsis*, Tominaga *et* Kano, 1999; *Shikokuconocephalopsis* Kano, 1999; *Asymmetricercus* Kitoki, 1999 以及本文描述的一些新属。上述的这些属根据后足胫节端距的特征可分为 2 个组,这些属(*Phlugiolopsis*, *Acyrtaspia*, *Cyrtopsis*, *Chandozhinskia*, *Sinocyrtaspis* Gen. n., *Acosmetura* Gen. n.)后足胫节腹面具 2 对端距。另一组的特征是后足胫节腹面具 1 对端距,包括的属有: *Thaumaspis*, *Nicephora*, *Cecidophagula*, *Tettigoniopsis*, *Cosmetura*, *Cononicephora*, *Acononicephora*, *Neocononicephora*, *Gibbomeconema*, *Kinkiconcephalopsis*, *Microconocephalopsis*, *Shikokuconocephalopsis*, *Asymmetricercus*, *Paracosmetura* Gen. n.。拟穹螽属 *Acyrtaspia* Bey-Bienko (1955) 很可能是吟螽属 *Phlugiolopsis* Zeuner (1940) 的同物异名。

中国蛩螽族短翅类群的分属检索表

1 (10) 后足胫节腹面具 4 个端距
2 (3) 中足和后足股节膝叶端部具刺 ······ 刺膝螽属 *Cyrtopsis* Bey-Bienko, 1962
3 (2) 各足股节膝叶端部均缺刺
4 (5) 前胸背板侧片后部明显扩宽,雄性沟后区强凸形 ······ 华穹螽属 *Sinocyrtaspis* Gen. n.
5 (4) 前胸背板侧片后部趋狭,雄性沟后区非凸形或微抬高
6 (7) 雄性生殖器革质,裸露;雌性前翅侧置 ······ 异饰肛螽属 *Acosmetura* Gen. n.
7 (6) 雄性生殖器完全膜质,不裸露;雌性前翅相互重叠
8 (9) 雄性下生殖板后缘突出,腹突位于亚端部;雄性下生殖板横宽 ······ 吟螽属 *Phlugiolopsis* Zeuner, 1940
9 (8) 雄性下生殖板后缘不突出,腹突位于端部;雄性下生殖板非横宽 ······ 钱螽属 *Chandozhinskia* Gorochov, 1993
10 (1) 后足胫节腹面具 2 个端距
11 (14) 前胸背板侧片后部趋狭;雄性生殖器完全膜质,不裸露
12 (13) 雄性第 10 腹节背板后缘具不成对的突起;雌性前翅相互重叠 ······ 杉螽属 *Thaumaspis* Bolivar, 1900
13 (12) 雄性第 10 腹节背板后缘具成对的突起;雌性前翅侧置 ······ 啮螽属 *Cecidophagula* Uvarov, 1940
14 (11) 前胸背板侧片后部明显扩宽;雄性生殖器革质,裸露 ······ 副饰肛螽属 *Paracosmetura* Gen. n.

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1　华穹螽属，新属 *Sinocyrtaspis* Liu, gen.n.

模式种：*Sinocyrtaspis lushanensis* sp.n.

体小形。短翅类型。头顶钝圆锥形，背面中央具沟；下颚须端节长于亚端节。前胸背板侧片后部扩宽，缺肩凹；雄性沟后区明显抬高。各足股节腹面缺刺，膝叶端部钝圆；前足和中足胫节具刺，前足胫节听器为开放型；后足胫节腹面具4个端距。前翅完全隐藏于前胸背板之下，雌性侧置。雄性第10腹节背板具成对的突起；肛上板退化；下生殖板较大并具腹突；生殖器革质，外露。雌性第7腹板缺突起，产卵瓣边缘光滑。

本新属与穹螽属 *Cyrtaspis* Fischer, 1853 非常接近，但区别在于雄性第10腹节背板变形和生殖器外露，雌性第7腹板缺突起和产卵瓣边缘光滑。

分种检索表

1 (4) 雌性第9腹节背板侧部稍微向后延伸，远不到达下生殖板端部；雌性第10腹节背板后缘中央内凹，形成两宽圆的侧叶

2 (3) 雌性下生殖板近三角形，端部圆形，缺凹口；雄性第10腹节背板后缘中央具一对较长的向下弯的突起 ……………………………… 庐山华穹螽 *S. lushanensis* sp.n.

3 (2) 雌性下生殖板圆形，端部具凹口；雄性未知 ……………………………… 黄山华穹螽 *S. huangshanensis* sp.n.

4 (1) 雌性第9腹节背板侧部强向后延伸，到达下生殖板端部；雌性第10腹节背板后缘平截形 ……………………… 截缘华穹螽 *Sinocyrtaspis? truncata* Liu, sp.n.

1.1　庐山华穹螽，新种 *Sinocyrtaspis lushanensis* Liu, sp.n.（图1～5）

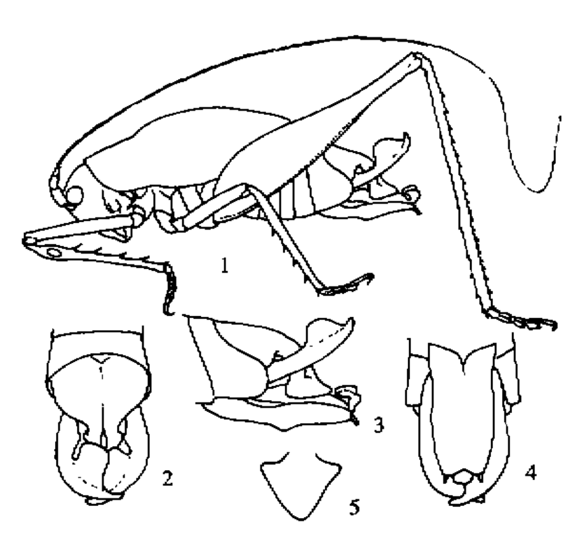


图1～5　庐山华穹螽 *Sinocyrtaspis lushanensis* Liu, sp.n.

1. 雄性整体侧面观（body of male, lateral view）；2. 雄性腹端背面观（male abdominal end, dorsal view）；3. 雄性腹端侧面观（male abdominal end, lateral view）；4. 雄性腹端腹面观（male abdominal end, ventral view）；5. 雌性下生殖板腹面观（female subgenital plate, ventral view）。

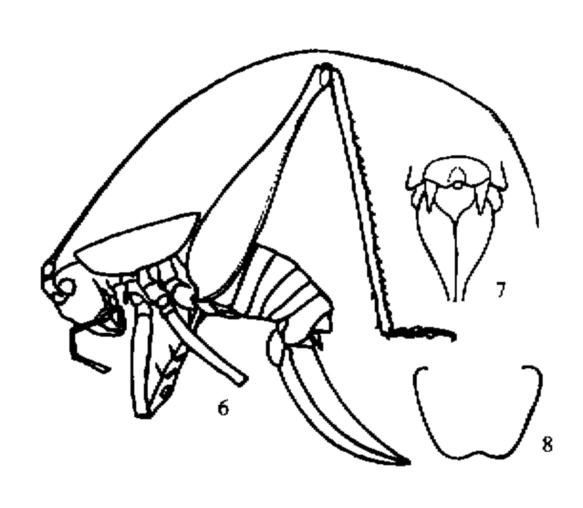


图6～8　黄山华穹螽 *Sinocyrtaspis huangshanensis* Liu, sp.n.

6. 雌性整体侧面观（body of female, lateral view）；7. 雌性腹端背面观（female abdominal end, dorsal view）；8. 雌性下生殖板腹面观（female subgenital plate, ventral view）。

雄性：头顶钝圆锥形，背面中央具弱的纵沟；下颚须端节长于亚端节。前胸背板较长，延伸至第8腹节，沟后区的长度约为沟前区的3倍，明显抬高；侧片后部扩宽，缺肩凹。各足股节腹面缺刺，膝叶端部钝圆；前足胫节刺排列为4，4（1，1）型，前足胫节听器为开放型；后足胫节背面内缘和外缘各具18～21个刺和腹面具4个端距。前翅完全隐藏于前胸背板之下，内缘重叠。第9腹节背板侧部向后延伸，端部圆形；第10腹节背板后缘中央具1对毗连的强向下弯的突起，在突起中部的外侧具1个小瘤突；尾须较长，到达下生殖板端部，内侧中部之后具1个圆叶；下生殖板长大于宽，后缘内凹并具1对小的腹突；生殖器向后突出，端部折向背方形成一个半圆形的盘。

雌性（可能是若虫）：第10腹节背板后缘中央内凹，形成两圆形的侧叶；尾须较短，圆锥形；下

生殖板近三角形，端部圆形，缺凹口；产卵瓣微向上弯、边缘光滑。

体淡黄色，单色。

体长♂ 11.5，♀8.5 mm；前胸背板♂ 6.8，♀3.6 mm；后足股节♂ 8.5、♀7.5 mm，产卵瓣♀4.5 mm。

正模♂，配模♀，江西（庐山五老峰），1982-08-15（刘祖尧采）。

1.2 黄山华穹螽，新种 *Sinocyrtaspis huangshanensis* Liu, sp.n.（图6～8）

雌性：头顶钝圆锥形，背面中央具弱的纵沟；下颚须端节长于亚端节。前胸背板后缘宽圆，侧片后部扩宽，缺肩凹。各足股节腹面缺刺，膝叶端部钝圆；前足胫节刺排列为4、4（1，1）型，前足胫节听器为开放型；后足胫节背面内缘和外缘各具20～21个刺和腹面具4个端距。前翅完全隐藏于前胸背板之下、侧置。第9腹节背板侧部强向后延伸，几乎到达下生殖板端部；第10腹节背板后缘中央内凹，形成两圆形侧叶；尾须较短，圆锥形；下生殖板椭圆形，端部具凹口；产卵瓣微向上弯，边缘光滑。

体褐色，单色。

雄性未知。

体长♀9.0 mm；前胸背板♀4.0 mm；后足股节♀8.7 mm、产卵瓣♀5.0 mm。

正模♀，安徽（黄山天都峰），1 300 m，1983-08-27（吴敦肃，杨毅明采）。

本新种与庐山华穹螽 *Sinocyrtaspis lushanensis* 较接近、区别在于体颜色及雌性下生殖板的形状。

1.3 截缘华穹螽，新种 *Sinocyrtaspis*? *truncata* Liu, sp.n.（图9～11）

雌性：头顶钝圆锥形，背面中央具弱的纵沟；下颚须端节长于亚端节。前胸背板后缘宽圆，侧片后部扩宽，缺肩凹。各足股节腹面缺刺，膝叶端部钝圆；前足胫节刺排列为4，4（1、1）型，前足胫节听器为开放型；后足胫节背面内缘和外缘各具20～21个刺和腹面具4个端距。前翅完全隐藏于前胸背板之下，侧置。第9腹节背板侧部稍微向后延伸，远不到达下生殖板端部；第10腹节背板后缘平截；尾须圆锥形；下生殖板长大于宽，后缘截形；产卵瓣微向上弯，边缘光滑。

体黄绿色、单色。

雄性未知。

体长♀12.5～13.0 mm；前胸背板♀4.8～5.0 mm；前翅♀0.8 mm；后足股节♀10.0 mm，产卵瓣♀5.5 mm。

正模♀，副模1♀，广西（兴安猫儿山），900～1 500 m，1992-08-18～19（刘宪伟，殷海生采）。

本新种与该属其他种的区别在于雌性第10腹节背板和雌性下生殖板的形状。

2 异饰肛螽属，新属 *Acosmetura* Liu, gen.n.

模式种：*Acosmetura brevicerca* sp.n.

体小形。短翅类型。头顶钝圆锥形，背面中央具沟；下颚须端节长于亚端节。前胸背板侧片后部趋狭，缺肩凹，雄性沟后区非凸形。各足股节腹面缺刺，膝叶端部钝圆；前足和中足胫节具刺、前足胫节听器为开放型；后足胫节腹面具4个端距。前翅隐藏于前胸背板之下，雌性侧置。雄性第10腹节背板横宽，后缘具凹口；肛上板退化；尾须较短；下生殖板较长并具腹突；生殖器革质、裸露。雌性第7腹板缺突起，产卵瓣边缘光滑。

本新属与杉螽属 *Thaumaspis* Bolivar, 1900 和吟螽属 *Phlugiolopsis* Zeuner, 1940 非常接近、但区别在于雄性生殖器革质和裸露，雌性前翅侧置。与饰肛螽属 *Cosmetura* Yamasaki, 1983 的区别在于后足胫节腹面具4个端距。已知种分布于四川的 *Cosmetura nigrovittata* Liu *et* Bi, 1994 和河南的 *Cosmetura nigrogeniculata* Liu *et* Wang, 1998 应归并到本属内。

分种检索表

1 (4) 后足股节端部非暗黑色；雄性第10腹节背板后缘中央具半圆形的凹口；尾须不超过下生殖板。雌性下生殖板非横宽

2 (3) 雌性下生殖板近圆形，后缘中央微凹，具弱的中隆线；雄性尾须甚短，简单，端部内弯、下生殖板长，后缘中央具三角形凹口；生殖器稍裸露，端部向上弯 ………………………… 短尾异饰肛螽 *A. brevicerca* Liu, sp.n.

3 (2) 雌性下生殖板长大于宽、后缘内凹，缺中隆线；雄性未知 ………………………… 凹缘异饰肛螽 *A. emarginata* Liu, sp.n.

4 (1) 后足股节端部暗黑色；雄性第10腹节背板后缘中央具1个小刺；尾须超过下生殖板；雌性下生殖板横宽

5 (6) 后足股节内和外侧缺褐色斜条纹；雌性下生殖板后缘中央具浅凹口；雄性未知 ………………… 黑带异饰肛螽 *A. nigrovittata* (Liu *et* Bi, 1994)

6 (5) 后足股节内和外侧具褐色斜条纹；雄性第10腹节背板后缘中

央具1个小刺；尾须超过下生殖板；雌性未知 ………… 黑膝异饰肛螽 *A. nigrogeniculata* (Liu *et* Wang, 1998)

2.1 短尾异饰肛螽，新种 *Acosmetura brevicerca* Liu, sp.n.（图12～16）

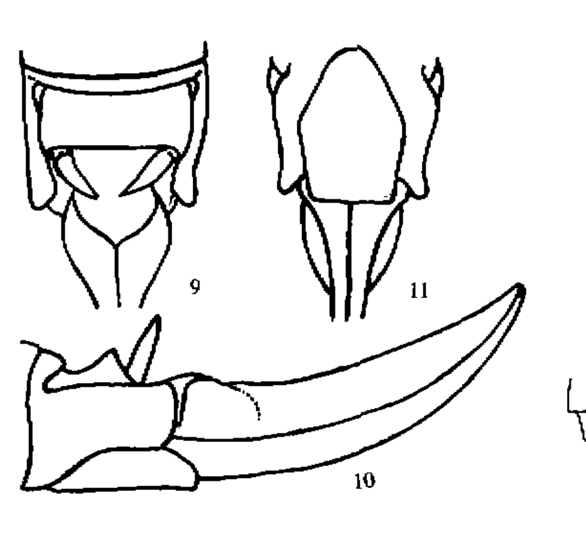
雄性：头顶钝圆锥形，背面中央具弱的纵沟；下颚须端节长于亚端节。前胸背板后缘宽圆，侧片后部趋狭，缺肩凹。各足股节腹面缺刺，膝叶端部钝圆；前足胫节刺排列为4，4（1，1）型，前足胫节听器为开放型；后足胫节背面内缘和外缘各具23个刺和腹面具4个端距。前翅完全隐藏于前胸背板之下，相互重叠。第9腹节背板后侧角向后延长，第10腹节背板后缘中央具半圆形的凹口；稍微变形；尾须较短，端部内弯，顶端较钝；下生殖板甚长，后缘中央具三角形凹口和1对较短的腹突；生殖器稍裸露，端部向上弯。

雌性：前翅完全隐藏于前胸背板之下，侧置。第10腹节背板后缘中央具浅的凹口，形成两个宽圆的侧叶；尾须圆锥形；下生殖板近圆形，后缘中央微凹，具弱的中隆线；产卵瓣明显短于后足股节，微向上弯，边缘光滑。

体淡绿色。前胸背板背面具1对平行的褐色侧条纹，其外侧具有不明显的黄色条纹，但近后缘消失；腹部背面具不明显的褐色纵带，雄性第10腹节背板凹口周缘具黑色。

体长♂ 10.5，♀12.5 mm；前胸背板♂ 4.0，♀4.2 mm；前翅♂ 1.0，♀0.8 mm；后足股节♂ 9.5，♀10.5 mm，产卵瓣♀6.5 mm。

正模♂，配模♀，广西：兴安猫儿山，900～1 500 m，1992-07-22～23，（刘宪伟，殷海生采）。



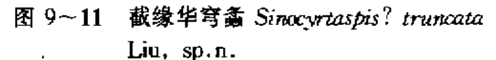


图9～11 截缘华穹螽 *Sinocyrtaspis*? *truncata* Liu, sp.n.

9. 雌性腹端背面观（female abdominal end, dorsal view）；10. 雌性腹端侧面观（female abdominal end, lateral view）；11. 雌性腹端腹面观（female abdominal end, ventral view）。

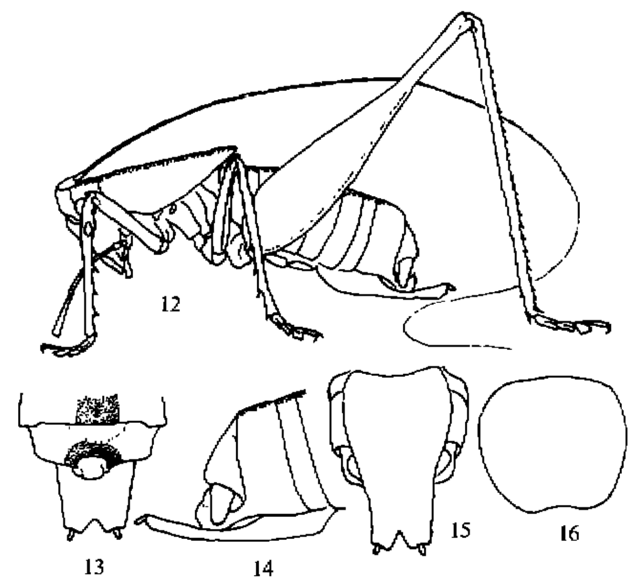


图12～16 短尾异饰肛螽 *Acosmetura brevicerca* Liu, sp.n.

12. 雄性整体侧面观（body of male, lateral view）；13. 雄性腹端背面观（male abdominal end, dorsal view）；14. 雄性腹端侧面观（male abdominal end, lateral view）；15. 雄性腹端腹面观（male abdominal end, ventral view）；16. 雌性下生殖板腹面观（female subgenital plate, ventral view）。

2.2 凹缘异饰肛螽，新种 *Acometura emarginata* Liu, sp.n.（图17～18）

雌性：头顶钝圆锥形，背面中央具弱的纵沟；下颚须端节长于亚端节。前胸背板后缘宽圆，侧片后部趋狭，缺肩凹。全部足损坏。前翅完全隐藏于前胸背板之下，相互重叠。第10腹节背板后缘中央微凹，形成两个宽圆的侧叶；尾须圆锥形；下生殖板长大于宽，后缘内凹；产卵瓣微向上弯，边缘光滑。

体淡黄褐色（活时或许为绿色），背面具褐色纵带。

雄性未知。

体长♀10.0 mm；前胸背板♀3.5 mm；前翅♀0.8 mm；后足股节♀?，产卵瓣♀5.0 mm。

正模♀，四川：雅安，1988-04~10，（冯炎采）。

本新种近似短尾异饰肛螽 *Acosmetura brevicerca*，但区别在于雌性下生殖板的形状及产卵瓣较短等。

3 啮螽属 *Cecidophagula* Uvarov，1940

3.1 指突啮螽，新种 *Cecidophagula digitata* Liu，sp.n.（图19~23）

雄性：头顶钝圆锥形，背面中央具弱的纵沟；下颚须端节长于亚端节。前胸背板后缘宽圆，侧片后部趋狭，缺肩凹。各足股节腹面缺刺，膝叶端部钝圆；前足胫节刺排列为3，3（1，1）型，前足胫节听器为开放型；后足胫节背面内缘和外缘各具12~17个刺和腹面具2个端距。前翅稍微露出前胸背板之外，端部截形。第10腹节背板后缘向后突出成两个指状的突起；尾须较长，稍内弯，内侧微变平，缺突起；下生殖板端部具1对密被细刺的圆瘤，腹突较短小，位于圆瘤的端部；生殖器不裸露。

雌性：前翅几乎完全隐藏于前胸背板之下，侧置。第10腹节背板后缘中央具浅的凹口，形成两个三角形的侧叶；尾须圆锥形；下生殖板基部较宽，向端部逐渐趋狭，后缘内凹；具尖锐的后侧角；产卵瓣明显短于后足股节，微向上弯，边缘光滑。

体淡绿色，单色。

体长♂10.5~11.8，♀10.8~11.0 mm；前胸背板♂♀3.5~3.8 mm；前翅♂2.8，♀1.0~1.2 mm；后足股节♂6.0~6.5，♀7.0 mm，产卵瓣♀4.5~4.8 mm。

正模♂，配模♀，副模5♂♂，2♀♀，广西（兴安猫儿山），1 500 m，1992-07-20~21，（刘宪伟，殷海生采）。

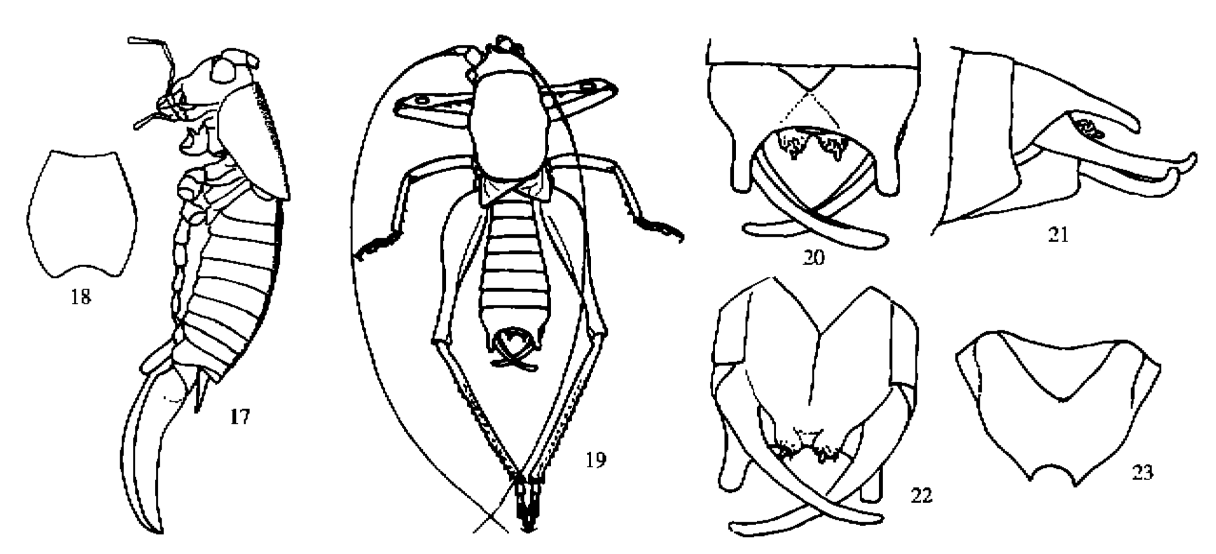


图17~18 凹缘异饰肛螽 *Acosmetura emarginata* Liu，sp.n.

17.雌性整体侧面观（body of female, lateral view）；18.雌性下生殖板腹面观（female subgenital plate, ventral view）。

图19~23 指突啮螽 *Cecidophagula digitata* Liu，sp.n.

19.雄性整体背面观（body of male, dorsal view）；20.雄性腹端背面观（male abdominal end, dorsal view）；21.雄性腹端侧面观（male abdominal end, lateral view）；22.雄性腹端腹面观（male abdominal end, ventral view）；23.雌性下生殖板腹面观（female subgenital plate, ventral view）。

4 副饰肛螽属，新属 *Paracosmetura* Liu，gen.n.

模式种：*Paracosmetura cryptocerca* sp.n.

体小形。短翅类型。头顶钝圆锥形，背面中央具沟；下颚须端节长于亚端节。前胸背板侧片后部扩宽，缺肩凹。各足股节腹面缺刺，膝叶端部钝圆；前足和中足胫节具刺，前足胫节听器为开放型；后足胫节腹面具2个端距。前翅隐藏于前胸背板之下，雌性侧置。雄性第10腹节背板具叶；肛

上板退化；尾须极短，不裸露；下生殖板长和具腹突；生殖器革质，裸露。雌性产卵瓣镰状，边缘光滑。

本新属与饰肛螽属 *Cosmetura* Yamasaki，1983 的区别在前胸背板侧片后部扩宽，雄性肛上板退化和尾须极短，不裸露。

4.1 隐尾副饰肛螽，新种 *Paracosmetura cryptocerca* Liu，sp.n.（图 24～28）

雄性：头顶钝圆锥形，背面中央具弱的纵沟；下颚须端节长于亚端节。前胸背板后缘宽圆，侧片后部扩宽，缺肩凹。各足股节腹面缺刺，膝叶端部钝圆；前足胫节刺排列为 4，4（1，1）型，前足胫节听器为开放型；后足胫节背面内缘和外缘各具 17～19 个刺和腹面具 2 个端距。前翅几乎完全隐藏于前胸背板之下。第 10 腹节背板向后突出并形成两个向下弯的钝叶；尾须极短，完全隐藏于第 10 腹节背板之下；下生殖板较长，后缘具宽 V 形的凹口和 1 对较短的腹突；生殖器革质，裸露，端部向上弯和开裂为两叶。

雌性：前翅完全隐藏于前胸背板之下，侧置。第 10 腹节背板后缘中央具浅的凹口，形成两个三角形的侧叶；尾须圆锥形；下生殖板椭圆形，后缘微平截；产卵瓣明显短于后足股节，微向上弯，边缘光滑。

体淡绿色，背面从头部至腹端具较明显的褐色纵带。

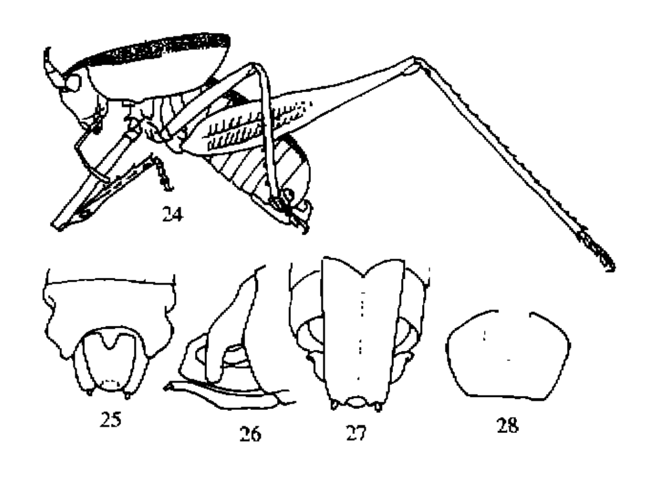


图 24～28 隐尾副饰肛螽 *Paracosmetura cryptocerca* Liu，sp.n.

24. 雄性整体侧面观(body of male, lateral view)；25. 雄性腹端背面观(male abdominal end, dorsal view)；26. 雄性腹端侧面观(male abdominal end, lateral view)；27. 雄性腹端腹面观(male abdominal end, ventral view)；28. 雌性下生殖板腹面观(female subgenital plate, ventral view)。

体长♂ 9.0，♀9.0 mm；前胸背板♂ 4.6，♀4.0 mm；前翅♂ 2.8，♀1.0 mm；后足股节♂ 8.0，♀8.0 mm，产卵瓣♀4.0 mm。

正模♂，配模♀，副模 1♂，7♀，广西（兴安猫儿山），900～1 500 m，1992-07-18～19，（刘宪伟，殷海生采）。

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THREE NEW GENERA AND SEVEN NEW SPECIES OF THE TRIBE MECONEMATINI FROM CHINA

(Orthoptera: Tettigonioidea: Meconematidae)

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Abstract: This paper is based on the material of the tribe Meconematini from China, three new genera and seven new species are described, and key to the genera of Chinese brachypterous Meconematini are given. The type specimens are deposited in Shanghai Institute of Entomology, the Chinese Academy of Science (IEAS).

Since the tribe Meconematini was created Brumeister in 1838, so far, there have been 58 genera 17 subgenera 348 species and 6 subspecies known from Old World. In Asia have been 16 genera in relation to the branchypterous, they are *Thaumaspis* Bolivar, 1900; *Nicephora* Bolivar, 1900; *Cecidophagula* Uvarov, 1939; *Phlugiolopsis* Zeuner, 1940; *Acyrtaspia* Bey-Bienko, 1955; *Cyrtopsis* Bey-Bienko, 1962; *Tettigoniopsis* Yamasaki, 1982; *Cosmetura* Yamasaki, 1983; *Cononicephora*, Gorochov, 1993; *Acononicephora* Gorochov, 1994; *Neocononicephora* Gorochov, 1998; *Gibbomeconema* Ishikawa, 1999; *Kinkiconcephalopsis* Kano, 1999; *Microconocephalopsis*, Tominaga *et* Kano, 1999; *Shikokuconocephalopsis* Kano, 1999; *Asymmetricercus* Kitoki, 1999 and several new genera described in this paper. The above mentioned genera, may divide into two groups by the structures of the apical spurs of hind tibiae. The genera *Phlugiolopsis*, *Acyrtaspia*, *Cyrtopsis*, *Chandozhinskia*, *Sinocyrtaspis* Gen. n., *Acosmetura* Gen. n. each with two pairs of apical spurs. While the other group is charcaterized by the presence of a pair of apical spurs on the ventral surface of hind tibiae and contains the genera: *Thaumaspis*, *Nicephora*, *Cecidophagula*, *Tettigoniopsis*, *Cosmetura*, *Cononicephora*, *Acononicephora*, *Neocononicephora*, *Gibbomeconema*, *Kinkiconcephalopsis*, *Microconocephalopsis*, *Shikokuconocephalopsis*, *Asymmetricercus*, *Paracosmetura* Gen. n. The genus *Acyrtaspia* Bey-Bienko (1955) it may possibly be synonymy of genus *Phlugiolopsis* Zeuner (1940).

Key to genera of the brachypterous Meconematini in China

1 (10) Ventral surface of hind tibiae with 4 apical spurs
2 (3) Apex of genicular lobes of mid and hind femora each with a single spine ········ *Cyrtopsis* Bey-Bienko, 1962
3 (2) Apex of genicular lobes of all femora bluntly rounded, without spine
4 (5) Posterior part of lateral lobe of pronotum widened, metazona strongly convex in male ········ *Sinocyrtaspis* Liu, Gen. n.
5 (4) Posterior part of lateral lobe of pronotum becoming narrower, metazona not convex or slightly raised in male
6 (7) Male genitalia sclerous, exposed; female tegmina laterally ········ *Acosmetura* Liu, Gen. n
7 (6) Male genitalia entirely membranous, not exposed; female tegmina overlapping each other
8 (9) Hind margin of male subgenital plate produced backwards, styli is situated in the subapex; female subgenital plate transverse ········ *Phlugiolopsis* Zeuner, 1940 (= *Acyrtaspia* Bey-Bienko, 1955)
9 (8) Hind margin of male subgenital plate not produced backwards, styli situated in the apex; female subgenital plate longer than wide ········ *Chandozhinskia* Gorochov, 1993
10 (1) Ventral surface of hind tibiae with 2 apical spurs
11 (14) Posterior part of lateral lobe of pronotum becoming narrower; male genitalia entirely membranous, not exposed
12 (13) Male tenth abdominal tergite with unpaired process; tegmina of female overlapping each other ········ *Thaumaspis* Bolivar, 1900
13 (12) Male tenth abdominal tergite with paired processes; tegmina laterally in female ········ *Cecidophagula* Uvarov, 1940
14 (11) Posterior part of lateral lobe of pronotum widened; male genitalia sclerous, exposed ········ *Paracosmetura* Liu, Gen. n.

1 *Sinocyrtaspis* Liu, gen. n.

Type-species: *Sinocyrtaspis lushanensis* sp. n.

Small-sized. Brachypterous. Head with bluntly conical fastigium of vertex, with a longitudinal groove at middle of dorsal surface; last segment of maxillary palpi appreciably longer than the preceding one. Lateral lobe of pronotum widened at posterior part, without humeral sinus; metazona strongly convex in male. All femora unarmed, genicular lobes of mid and hind femora bluntly rounded; fore and mid tibiae armed, auditory foramina of fore tibiae opened; hind tibiae beneath with 4 apical spurs. Tegmina concealed under the pronotum, laterally in female. Male tenth abdominal tergite with paired processes at hind margin; epiproct reduced; subgenital plate large and with styli; genitalia sclerous and exposed. Female seventh. sternum without processes and ovipositor with smooth edges.

Similar to the genus *Cyrtaspis* Fischer, 1853, but differs from it apparently by the characters of male

tenth abdominal tergite remarkably deformed with processes and genitalia sclerous and exposed; female seventh sternum without processes and ovipositor with smooth edges.

Key to species of the genus *Sinocyrtaspis*

1 (4) Lateral part of female nine abdominal tergite slightly producing backwards, not reaching to the apex of subgenital plate; female tenth abdominal tergite with a shallow incision at middle of hind margin and with two widely rounded lobes

2 (3) Coloration yellowish; female subgenital plate roundly triangular, without apical notch; male tenth abdominal tergite with a pair long processes bent downwards; male cerci with a rounded internal lobe at middle ·· *S. lushanensis* Liu, sp. n.

3 (2) Coloration brownish; female subgenital plate rounded, with apical notch; male unknown ················ *S. huangshanensis* Liu, sp. n.

4 (1) Lateral part of female nine abdominal tergite strongly producing backwards, reaching to the apex of subgenital plate; female tenth abdominal tergite with truncate hind margin; female subgenital plate longer than wide, with truncated hind margin; coloration greenish; male unknown ·· *S. truncata* Liu, sp. n.

2　*Acosmetura* Liu, gen. n.

Type-species: *Acosmetura brevicerca* sp. n.

Small-sized. Brachypterous. Head with bluntly conical fastigium of vertex, with a longitudinal groove at middle of dorsal surface; last segment of maxillary palpi appreciably longer than the preceding one. Lateral lobe of pronotum becoming narrower at posterior part, without humeral sinus; metazona not convex in male. All femora unarmed, genicular lobes of mid and hind femora bluntly rounded; fore and mid tibiae armed, auditory foramina of fore tibiae opened; hind tibiae beneath with 4 apical spurs. Tegmina concealed under the metazona of pronotum, laterally in female. Male tenth abdominal tergite with processes or large notch at hind margin; cerci simplex; subgenital plate large and with styli; genitalia sclerous and exposed. Female ovipositor with smooth edges.

Similar to genera *Phlugiolopsis* Zeuner, 1940 and *Chandozhinskia*, Gorochov, 1993 but differs from both apparently by the characters of male genitalia and female tegmina laterally. This new genus is distinguished from *Cosmetura* Yamasaki, 1983 by the hind tibiae with two pairs of apical spurs at ventral surface. The two known species *Cosmetura nigrovittata* Liu *et* Bi, 1994 and *Cosmetura nigrogeniculata* Liu *et* Wang, 1998 are transferred into the new genus *Acosmetura*.

Key to species of the genus *Acosmetura*

1 (4) Apex of hind femora not blackish; male tenth abdominal tergite with large notch at hind margin; cerci not extending beyond the apex of subgenital plate; female subgenital plate not transverse

2 (3) Female subgenital plate nearly rounded, with a medial keel; male cerci short, simplex, with apex incurved; male subgenital plate long, with a triangular notch at hind margin; male genitalia exposed, with apex bent upwards ································ *A. brevicerca* Liu, sp. n.

3 (2) Female subgenital plate longer than wide, with concave hind margin and without a medial keel; male unknown ·· *A. emarginata* Liu, sp. n.

4 (1) Apex of hind femora blackish; male tenth abdominal tergite with a spine at middle of hind margin; cerci extending beyond the apex of subgenital plate; female subgenital plate transverse

5 (6) Hind femora striated with brown on the internal and external face; male cerci rather long, with a feebly rounded lobe at the dorso-basal part; male subgenital plate with a triangular incision at hind margin; female unknown ······················ *A. nigrovittata* (Liu *et* Bi, 1994)

6 (5) Hind femora not striated with brown on the internal and external face; female subgenital plate transverse, semicircular, with a shallow incision at hind margin; male unknown

································ *A. nigrogeniculata* (Liu *et* Wang, 1998)

3　*Cecidophagula digitata* Liu, sp. n.

Male. Small-sized. Coloration greenish. Head with bluntly conical fastigium of vertex. Last segment of maxillary palpi longer than the preceding one. Pronotum with rounded hind margin; hind part of lateral lobe becoming narrower, without humeral sinus. All femora unarmed. Auditory foramina of fore tibiae opened, spines of fore tibiae armed type are 3, 3(1, 1), internal and external dorsal margin of hind tibiae each with 12-17 spines and beneath with 2 apical spurs. Tegmina shortened, with truncated apex. Tenth abdominal tergite produced backwards into two long, finger-shape processes; cerci long, incurved and the inner surface slightly flattened, without process; subgenital plate with a pair inflated lobes at hind margin, which are armed with very small teeth and with short styli.

Female. Tegimina concealed under the pronotum, laterally. Hind margin of tenth abdominal tergite slightly concave, with two widely rounded lateral lobes; cerci conical; subgenital plate wide in basal part, narrowed distally, hind margin slightly emarginate and the lateral angles acutely pointed. Female ovipositor shorter than hind femora, sickle-shape, with smooth edges.

Length. Body ♂ 10.5 - 11.8, ♀ 10.8 - 11.0 mm; pronotum ♂ 3.5 - 3.8, ♀ 3.5 - 3.6 mm; tegmina

♂ 2.8, ♀1.0 – 1.2 mm; hind femora ♂ 6.0 – 6.5, ♀ 7.0 mm; ovipositor ♀4.5 – 4.8 mm.

Holotype ♂, Allotype ♀, Paratype 5♂♂, 2♀♀, Guangxi (Xingan Maoershan), 1 500 m (LIU Xian-Wei and YIN Hai-Sheng).

This new species very similar to *Cecidophagula leeuwenii* (Karny, 1921), but distinguished by the shape of tenth abdominal tergite and cerci of male.

4 *Paracosmetura* Liu, gen.n.

Type-species: *Paracosmetura cryptocerca* sp.n.

Small-sized. Brachypterous. Head with bluntly conical fastigium of vertex, with a longitudinal groove at middle of dorsal surface; last segment of maxillary palpi appreciably longer than the preceding one. Lateral lobe of pronotum widened at posterior part, without humeral sinus; metazona not convex in male. All femora unarmed, genicular lobes of femora with apex bluntly rounded; fore and mid tibiae armed, auditory foramina of fore tibiae opened; hind tibiae beneath with 2 apical spurs. Tegmina concealed under the pronotum, laterally in female. Male tenth abdominal tergite with lobes at hind margin; cerci short, covered; subgenital plate large and with styli; genitalia sclerous and exposed. Female ovipositor sickle-shape, with smooth edges.

Similar to genus *Cosmetura* Yamasaki, 1983, but differs from it apparently by the hind part of lateral lobe of pronotum widened, male epiproct reduced and cerci short, covered.

4.1 *Paracosmetura cryptocerca* Liu, sp.n.

Male. Small-sized. Coloration greenish, with brown band on dorsal surface. Head with bluntly conical fastigium of vertex. Last segment of maxillary palpi longer than the preceding one. Pronotum with rounded hind margin; hind part of lateral lobe becoming narrower, without humeral sinus. All femora unarmed. Auditory foramina of fore tibiae opened, spines of fore tibiae armed type are 4,4(1,1), internal and external dorsal margin of hind tibiae each with 17 – 19 spines and beneath with 2 apical spurs. Tegmina concealed under the pronotum. Tenth abdominal tergite produced backwards into two blunt lobes which are directed downwards; cerci very short, covered; subgenital plate long, with a broad V-shaped excision at hind margin, styli shorter; genitalia sclerous and exposed, with apex bent upwards and bifurcate.

Female. Tegimina concealed under the pronotum, laterally. Hind margin of tenth abdominal tergite slightly concave, with two widely rounded lateral lobes; cerci conical; subgenital plate oval, with the apex slightly truncated; ovipositor shorter than hind femora, sickle-shape, with smooth edges.

Length. Body ♂ 9.0, ♀ 9.0 mm; pronotum ♂ 4.6, ♀ 4.0 mm; tegmina ♂ 2.8, ♀ 1.0 mm; hind femora ♂ 8.0, ♀ 8.0 mm; ovipositor ♀ 4.0 mm.

Holotype ♂, Allotype ♀, Paratype 1♂, 7♀♀, Guangxi (Xingan Maoershan), 900 – 1 500 m (LIU Xian-Wei and YIN Hai-Sheng).

Key words: Meconematini; Brachypterous; New genera; New species; China